(19) World Intellectual Property Organization International Bureau



TO THE RESIDENCE OF THE PROPERTY OF THE PROPER

(43) International Publication Date 28 October 2004 (28.10.2004)

PCT

(10) International Publication Number WO 2004/092121 A3

- (51) International Patent Classification⁷: C0 239/91
- C07D 239/36,
- (21) International Application Number:

PCT/US2004/010639

- (22) International Filing Date: 7 April 2004 (07.04.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/460,859 60/479,323 7 April 2003 (07.04.2003) US 18 June 2003 (18.06.2003) US

- (71) Applicant (for all designated States except US): NPS PHARMACEUTICALS, INC. [US/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SHCHERBAKOVA, Irina [US/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US). BALANDRIN, Manuel [US/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US). HUANG, Guangfei [CN/US]; 13305 Rachael Blvd., Alachua, FL 32615 (US). GEOFFROY, Otto [US/US]; 13305 Rachael Blvd., Alachua, FL 32615 (US). FOX, John [GB/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US). NAIR, Satheesh, K. [IN/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US).

- (74) Agents: LAURENCE, Kevin B. et al.; One Utah Center, 201 So. Main Street, Suite 1100, Salt Lake City, UT 84111 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- (88) Date of publication of the international search report: 14 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10639

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C07D 239/36, 239/91	
US CL : 544/287, 319	
According to International Patent Classification (IPC) or to both national classification and IPC	
B. FIELDS SEARCHED	
Minimum documentation searched (classification system followed by classification symbols) U.S.: 544/287, 319	
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched	
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CAS ONLINE	
C. DOCUMENTS, CONSIDERED TO BE RELEVANT	
Category * Citation of document, with indication, where ap	
X US 5,378,678 A (TICE) 03 January 1995 (03.01.1995 lines 62-67.	5), see the reaction scheme in col. 5, 1-4, 18-21, 38-40
	<u> </u>
Further documents are listed in the continuation of Box C.	See patent family annex.
Special categories of cited documents:	"T" later document published after the international filing date or priority
"A" document defining the general state of the art which is not considered to be	date and not in conflict with the application but cited to understand the principle or theory underlying the invention
of particular relevance	"X" document of particular relevance; the claimed invention cannot be
"E" earlier application or patent published on or after the international filing date	considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is
"O" document referring to an oral disclosure, use, exhibition or other means	combined with one or more other such documents, such combination being obvious to a person skilled in the art
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
09 January 2005 (09.01.2005)	
Name and mailing address of the ISA/US	Authorized officer March / Walts
Mail Stop PCT, Attn: ISA/US Commissioner of Patents	Deepak Rao
P.O. Box 1450	•
Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Telephone No. 571-272-1600

Form PCT/ISA/210 (second sheet) (July 1998)